

CLAIMS

1. A system for computer-aided intravenous delivery of anesthetics and/or other drugs to a patient, and  
5 which comprises:
  - an Infusion Controller arranged for delivering an amount of drug(s) to a patient;
  - a Communication Controller connected with infusion pumps and/or monitors;
  - 10 a Graphic User Interface to display different views of the system and to accept user input;
  - a first interface to link the Infusion Controller to views displayed by said Graphical User Interface;
  - 15 a Session Controller arranged to carry out the modeling of anesthesia procedures and arranged to run a first procedure and to dynamically adapt said first procedure and/or select and run a second procedure based upon one or more of said sensors' output and/or observation from a physician;
  - 20 a second interface linking said Session Controller to said views displayed by said Graphical User Interface;
  - a Processor or Infusion Session Manager integrating the Graphic User Interface, the Infusion Controller, the Communication Controller and the Session Controller and arranged for steering drug delivery,
- 25 wherein the system also contains a set of configurable written procedures to steer intravenous anesthetic drug delivery and/or other drug delivery, whereby said procedures are adapted to the type of surgical action and/or therapy, adapted to the

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patient's physical condition, and adapted to the type of drugs, tools and theoretical models used.

2. The system according to claim 1 further comprising a DataLogger Controller with one or more sensors adapted so as to  
5 be coupled to a patient and to generate signals reflecting one or more health conditions or statuses of the patient, whereby a third interface is provided for linking the Datalog Controller to said views by the Graphical user interface, said Datalog Controller further being integrated by said Processor or  
10 Infusion Session Manager.

3. The system according to claim 1, further comprising an Archiving Manager which is in contact with the Infusion Session Manager and is under the control of the same program as the Infusion Session Manager.

15 4. The system according to claim 1, wherein the Archiving Manager and the Infusion Session Manager may be independently transportable units.

5. The system according to claim 1, wherein the person in charge or the user may set the level of desired assistance  
20 via a graphical user interface.

6. The system according to claim 1, wherein only an expert user is allowed to edit and/or make permanent changes to the procedures.

7. The system according to claim 1, wherein the trigger to  
25 launch or change a running procedure comes from an internal state and/or from an externally received command or request.

8. The system according to claim 1, wherein the procedures contain tasks and/or commands per major event, phase or step in said surgery and/or therapy.

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9. The system according to claims 1, wherein the Infusion Controller is arranged for administering at least one intravenous drug selected from the group consisting of hypnotics, analgesics, amnesics, paralyzing agents, 5 vasodepressors and pressor substances and any drug that is used in cancer therapy.

10. The system according to claim 9, wherein the hypnotic is propofol..

11. The system according to claim 9, wherein the analgesic is remifentanil.

12. The system according to claim 9, wherein the amnesic is mivacurium.

13. The system according to claim 10, wherein the drug state model for propofol is that of Schnider.

14. The system of claim 11, wherein the drug state model for remifentanil is that of Minto.

15. The system according to claim 9, wherein the drug used in cancer therapy is applied in combination with antibiotics.

20 16. The system according to claim 1, which further contains constraints and/or safety measures that dictate that a minimal amount of time has to pass between two subsequent modifications to a procedure.

25 17. The system according to claim 1, wherein the reliability of a signal or parameter is determined by the quality of said signal, by its relation with other related signals or parameters and/or by the deviation from a normal value and/or from a safe range.

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**18.** A method for intravenous anesthesia which comprises the step of obtaining an intravenous delivery of a drug to a patient by the system of claim 1.

**19.** A method for the treatment of cancer which comprises  
5 the step of obtaining an intravenous delivery of a drug to a patient by the system of claim 1.